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sustainment training	tank commander	tank gunner

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)
Research was performed to develop tank gunnery sustainment training materials for M60A3 armor crewmembers. This research product consists of 6 booklets for use by tank commanders in maintaining their knowledge and skill in issuing basic fire commands. The first booklet (RP 83-01A) provides an overview of fire command knowledges and contains training notes. The remaining five booklets provide practice in: classifying threats (RP 83-01B); selecting ammo/weapons (RP 83-01C); sequencing fire command elements (RP 83-01D); issuing fire commands for single engagements (RP 83-01E); and issuing fire commands for multiple and (continued)

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simultaneous engagements (RP 83-01F).

FIRE COMMANDS FOR THE M60A3 TANK
BOOKLET 5
SINGLE TARGET ENGAGEMENTS
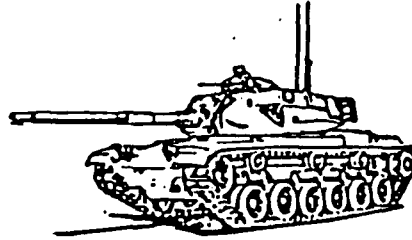
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RESEARCH PRODUCT
RP 83-1-E

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BOOKLET NUMBER 5

SINGLE TARGET ENGAGEMENTS

USER'S GUIDE

This is booklet number 5 in a set of six booklets. The
set deals with issuing fire commands on the M60A3 tank. When
you have finished the complete set you will be able to:

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ISSUE A CORRECT FIRE COMMAND FOR THE MAIN
GUN OR ANY MACHINEGUN IN EITHER SINGLE,
MULTIPLE OR SIMULTANEOUS TARGET ENGAGEMENTS.
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BACKGROUND

In order to win on the battlefield, you must be able to
construct a correct fire command.

THIS BOOKLET

This booklet will give you practice in constructing fire commands for single target engagements.

The booklet contains battlefield scenarios. Each scenario includes:

- A picture of the battlefield,
- A short written description of the battlefield situation,
- A question for you to answer.

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HOW TO USE THIS BOOKLET

1. Look at the scenario picture.
2. Read the written description.
3. Read the question following the description.

| NONE OF THE QUESTIONS HAVE ANSWERS. YOU MUST PROVIDE YOUR OWN ANSWER. |

4. Check your answer with the Answer Key on the page following the scenario.
5. Refer to:
   ● FM-17-12-3
   if you have any further questions.
6. Complete the rest of the scenarios.

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BEFORE YOU USE THIS BOOKLET

Before you use this booklet, be sure you have completed booklets 1 through 4 of this set.

TANK COMMANDER TRAINING NOTES

Training notes are presented in booklet 1.

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SCENARIO 1

THE SITUATION

- You are moving in a hasty attack.
- You meet a T-72 setting off to your right, range 1500 meters.
- The T-72 sees you.
- Round loaded is SABOT.
- M60A3 is fully operational.

What is your fire command?
What are the crew responses?

    (Assume a first round hit.)

SCENARIO 1 ANSWER

Your fire command should look like this:

TC:	GUNNER
	SABOT
	TANK
Loader:	UP
Gunner:	IDENTIFIED
	LASING
TC:	FIRE
Gunner:	ON THE WAY
	TARGET
TC:	TARGET, CEASE FIRE

This fire command is correct because it contains all of the
right elements and crew responses in the correct order.

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SCENARIO 2

THE SITUATION

- You are in a hasty attack.
- You meet a T-72 moving in from your right, range 1500 meters.
- The T-72 sees you.
- Round loaded is HEAT.
- M60A3 is fully operational.

What is your fire command?
What are the crew responses?

(Assume a first round hit.)

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SCENARIO 2 ANSWER

The best fire command is:

|	
TC:	GUNNER
	HEAT
	MOVING TANK
Loader:	UP
Gunner:	IDENTIFIED
	LASING
TC:	FIRE
	FIRE SABOT
Gunner:	ON THE WAY
	TARGET
TC:	TARGET, CEASE FIRE

Your fire command should include the information that says the
tank is moving.

You should fire off the HEAT round that is in the tube because
the T-72 is a MOST DANGEROUS THREAT (he can kill you, he has
seen you, and he is preparing to engage you).

You should also tell the loader you want your next round to
be SABOT in case you have to reengage this target.

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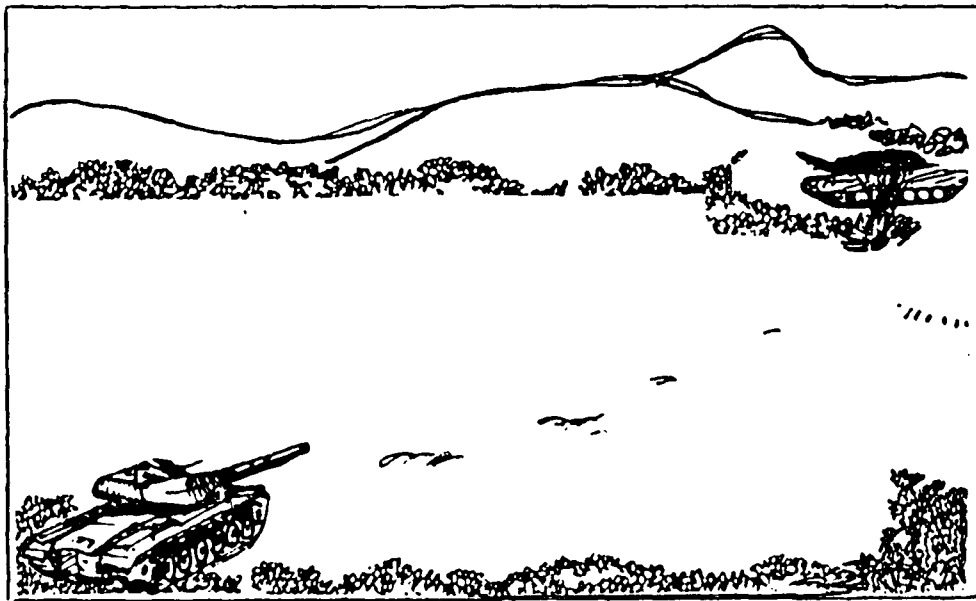
SCENARIO 3

THE SITUATION

● You are in a hasty attack.
● M60A3 is fully operational.
● You just fired a SABOT round at the T-72, range 1880 meters.
● The gunner reports an observation of SHORT.
● Your observation agrees with the gunner's.
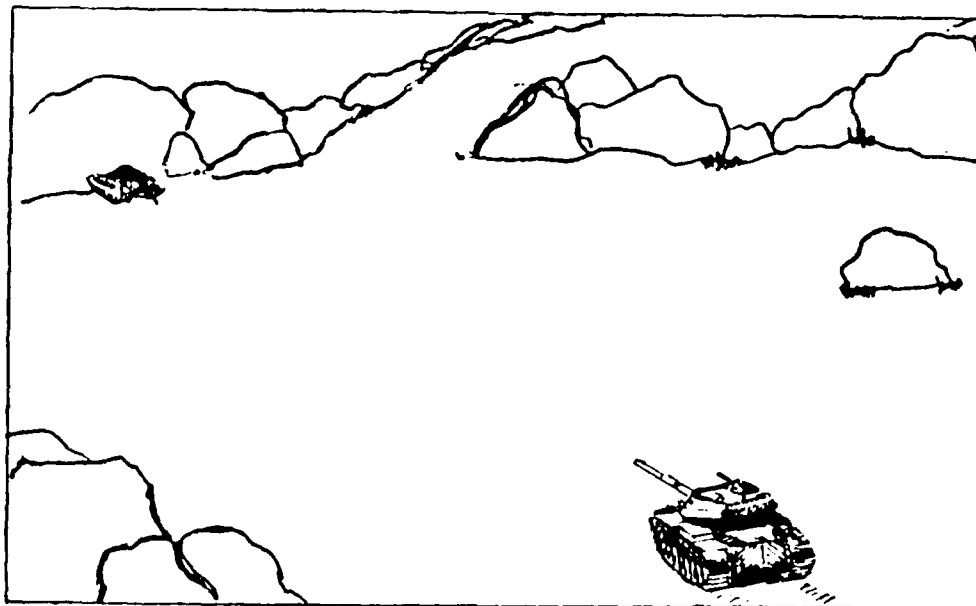
What is your next command?

15

SCENARIO 3 ANSWER

TC: SHORT
            REENGAGE

Your M60A3 if fully operational. Since the round fell SHORT,
the TC should check the gunner's lase and the range return to
ensure a correct (increased) range reading.

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SCENARIO 4

THE SITUATION

- You are in a hasty attack.
- Round loaded is SABOT.
- You see a T-62 at 1000 meters.
- Your laser rangefinder fails.
- The T-62 is preparing to engage you.

What is your fire command?
What are the crew responses?

    (Assume a first round hit.)

SCENARIO 4 ANSWER

The correct fire command is:

TC:	GUNNER
	BATTLESIGHT
	TANK
Loader:	UP
Gunner:	IDENTIFIED
TC:	FIRE
Gunner:	ON THE WAY
	TARGET
TC:	TARGET, CEASE FIRE

It is very important to know that in this engagement you MUST
use BATTLESIGHT gunnery. You should realize BATTLESIGHT is
needed when:

A most dangerous surprise target appears,
OR when denied use of the LRF.

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SCENARIO 5

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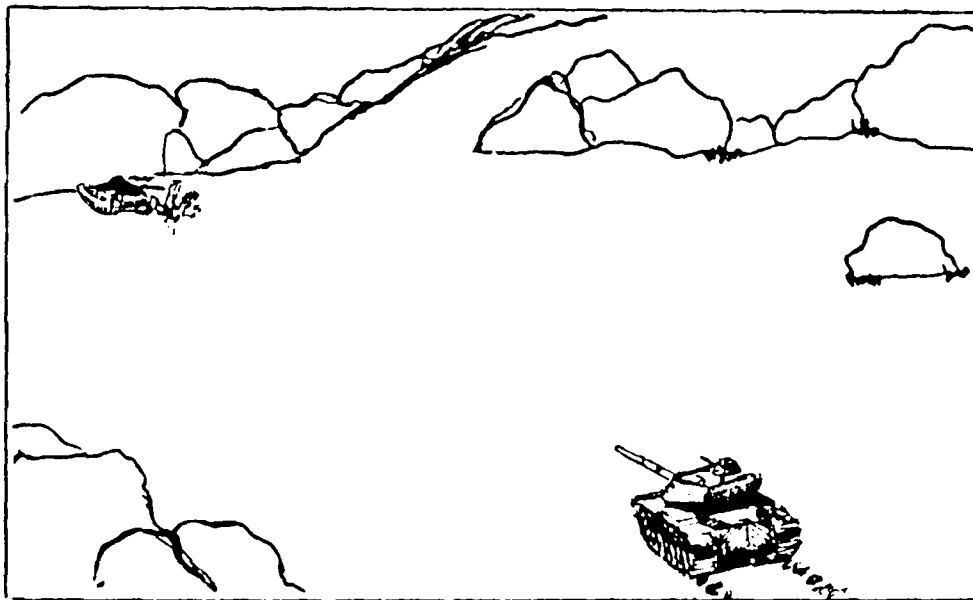
THE SITUATION

- You just fired a shot at the T-62 using BATTLESIGHT gunnery.
- The gunner reports an observation of SHORT.
- Your observation agrees with his.

What is the next fire command you would give in this situation?

SCENARIO 5 ANSWER

You could do one of two things:

1) When your observation agrees with the gunner's, you
   don't have to issue an adjustment command. You could
   simply remain silent.

   The gunner would then make the sight picture adjust-
   ments he thinks are necessary to hit the target.

2) Even though your observation agrees with the gunner's,
   you can announce an adjustment command to assist the
   gunner achieve target destruction. This adjustment
   command will normally contain four elements:

   ALERT
   DEFLECTION CORRECTION
   RANGE CORRECTION
   EXECUTION

NOTE: ADJUSTMENT commands are NOT given during M35E1/TTS
        precision gunnery.

        Both DEFLECTION and RANGE corrections are given in
        TARGET FORM or MILS.

    For example:

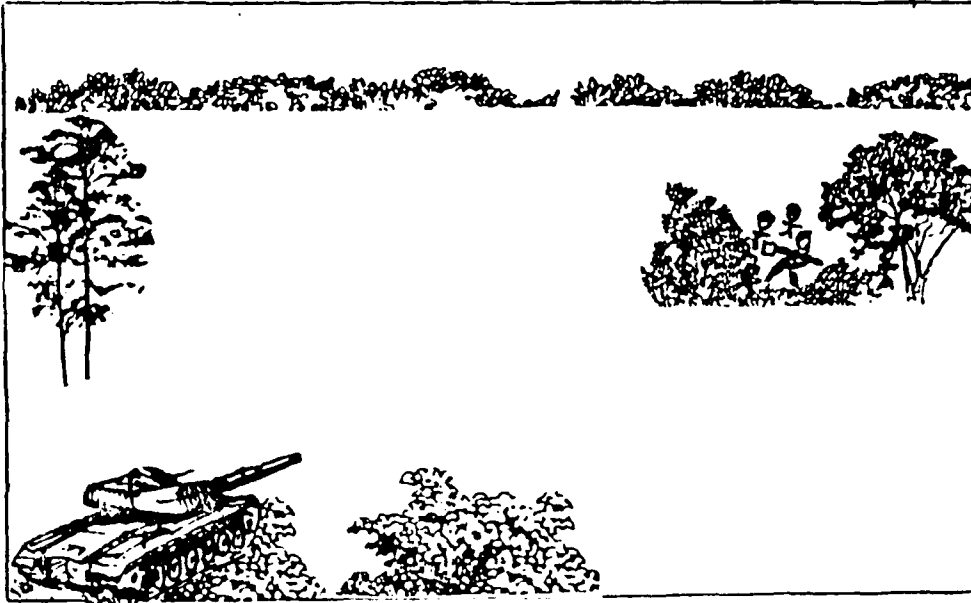   TC: SHORT
                     LEFT ONE FORM
                     ADD ONE-HALF FORM
                     FIRE

                     or

                TC: SHORT
                     LEFT ONE
                     ADD ONE
                     FIRE

SCENARIO 6

THE SITUATION

- You are in a deliberate attack.
- M60A3 is fully operational.
- Round loaded is SABOT.
- You see an SPG-9 at 1000 meters set up and ready to fire at you.

What is your fire command?
What are the crew responses?

(Assume target destruction with first shot.)
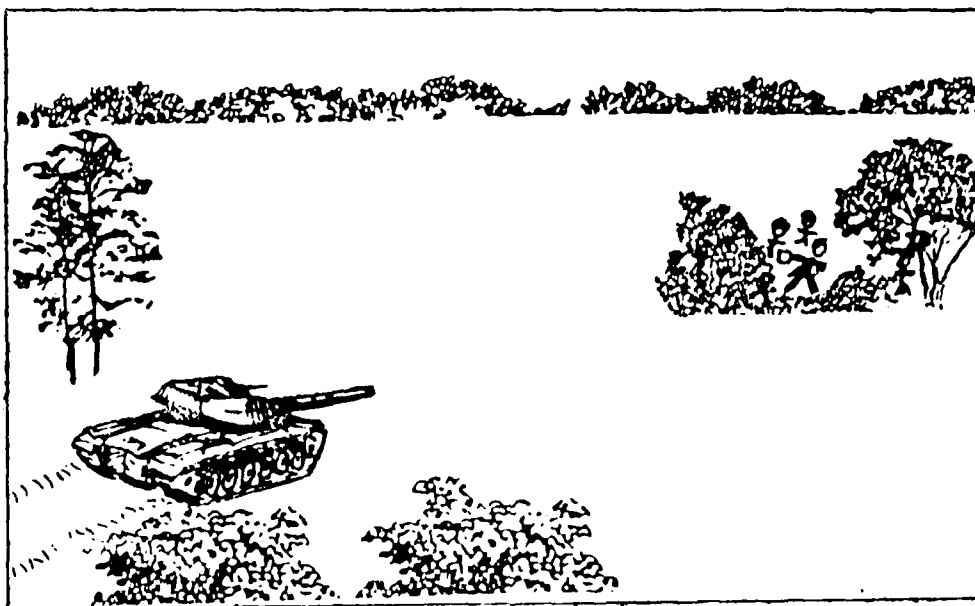
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SCENARIO 6 ANSWER

The fire command should be:

TC: CALIBER FIFTY . . .
            TC COMPLETE

You should engage the SPG-9 with your CAL 50. It is out-of-range for the COAX (900 meters maximum for the 7.62 mm!).

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SCENARIO 7

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THE SITUATION

- You are in a deliberate attack.
- Laser rangefinder not operational.
- Round loaded is HEAT.
- You see an SPG-9 at 750 meters that is set up and ready
  to fire at you.

What is your fire command?
What are the crew responses?

(Assume target destruction with first shot.)

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SCENARIO 7 ANSWER

The best fire command is:

|	
TC:	GUNNER
	COAX
	ANTITANK
Gunner:	IDENTIFIED
	LASING
TC:	FIRE
Gunner:	ON THE WAY
	TARGET
TC:	TARGET, CEASE FIRE

You could have used the CAL 50, but the target was within
range of the COAX. The M60A3 carries more of the 7.62 mm
ammo than it does CAL 50. It's better to save the CAL 50
ammo for targets that are out of range of the COAX.

The gunner could have fired a burst without lasing to the
target and then walked the rounds into the target area.
The correct answer is really dependent on the situation.

SCENARIO 8
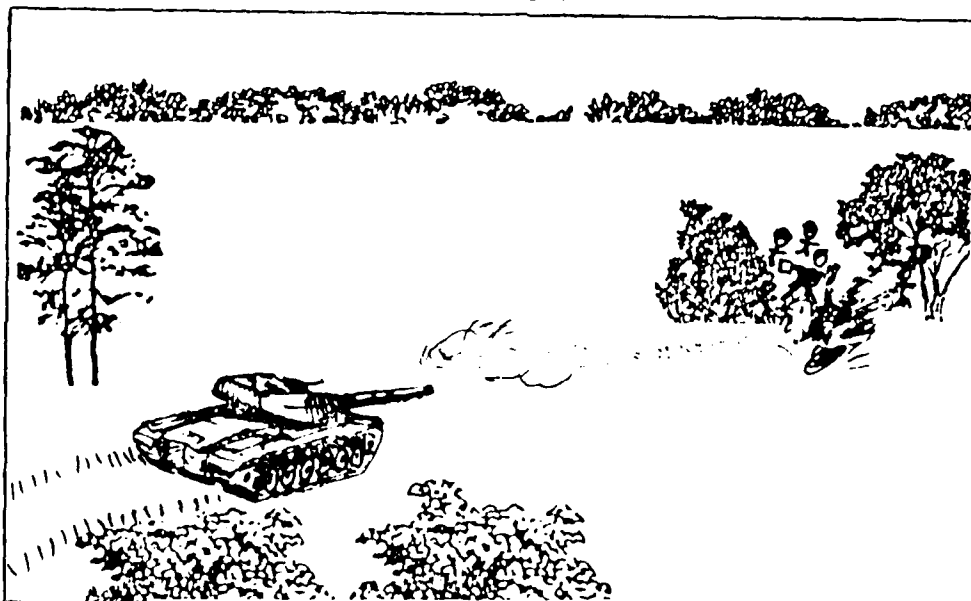
THE SITUATION

- You are engaging the SPG-9 at a range of 750 meters with the COAX.
- The gunner fires one burst at it, which falls SHORT.

What is your next command?

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SCENARIO 8 ANSWER

You can do one of two things:

1) Your observation will probably agree with the
   gunner's, so you can simply let him shoot another
   burst at the target. He will apply the sight
   picture adjustments he thinks are needed to kill
   the target. All you have to do is remain silent.
   If you remain silent the gunner then fires an-
   other burst. He DOES NOT announce "ON THE WAY"
   for the second burst.

2) You could assist the gunner by giving him adjust-
   ment information such as: "BRING IT UP AND LEFT."

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SCENARIO 9
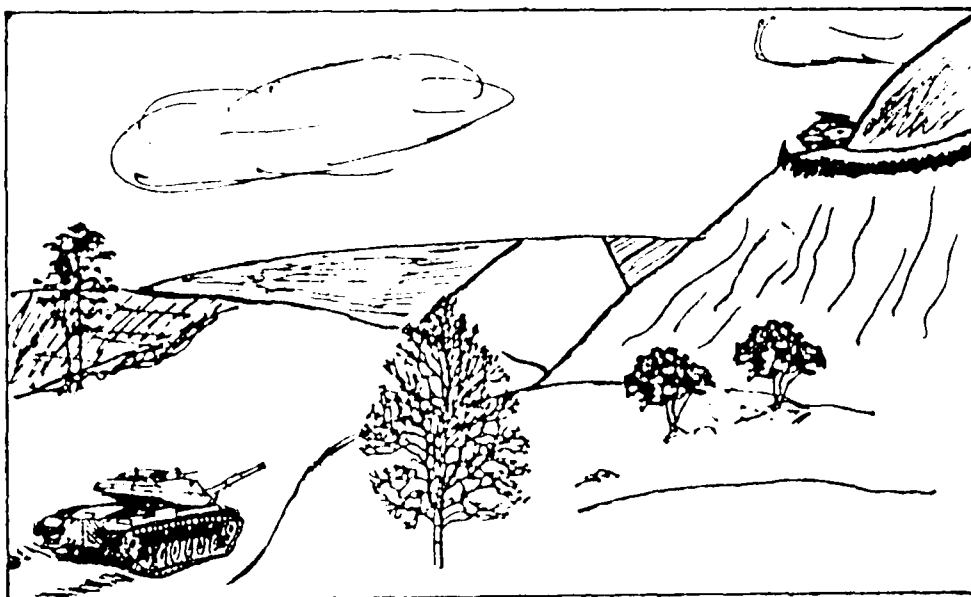
THE SITUATION

- You are in a bounding overwatch.
- You see a BRDM mounting SAGGER missiles at a range of 2000 meters.
- He is stopped and set up for a launch at you.
- M60A3 is fully operational.
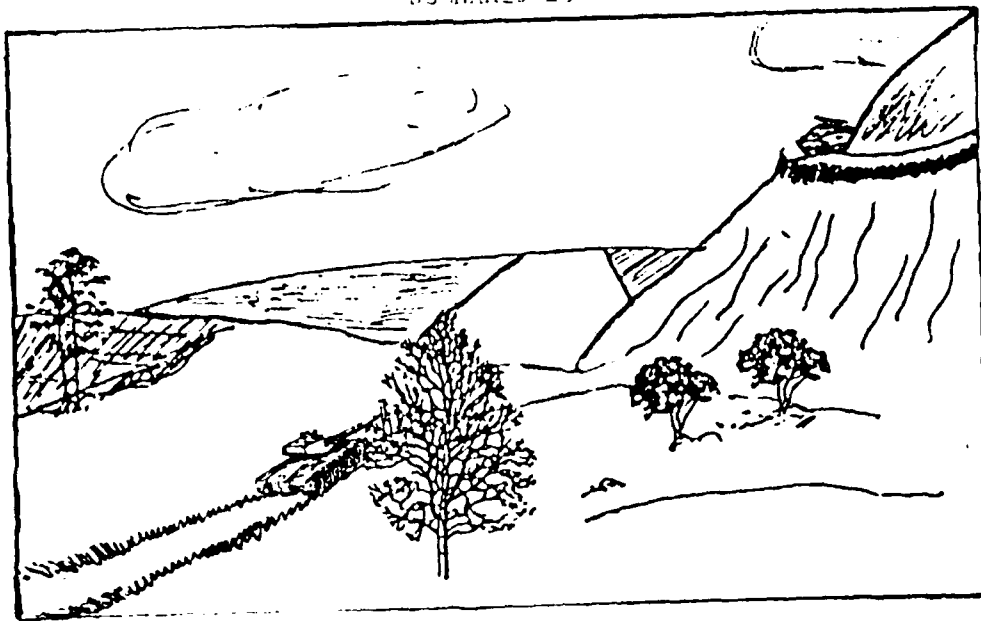- Round loaded is SABOT.

What is your fire command?
What are the crew responses?

(Assume a first round hit.)

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In this situation, you'd better fire the SABOT round at the
BRDM (rather than unload it) because he is a MOST DANGEROUS
THREAT.

You have to be ready to fire a second round, if necessary.
Since the best ammo for a BRDM is the HEAT round, it should
be announced as part of the initial fire command.

SCENARIO 10

THE SITUATION

- Your LRF is not operational.
- You are in a bounding overwatch.
- You see a BRDM mounting SAGGER missiles, off to your right at a range of 1000 meters.
- He is stopped and set up for a launch at you.
- Round loaded is HEAT.

What is your fire command?
What are the crew responses.

(Assume a first round hit.)

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SCENARIO 10 ANSWER

The best fire command is:

   TC: CALIBER FIFTY . . .
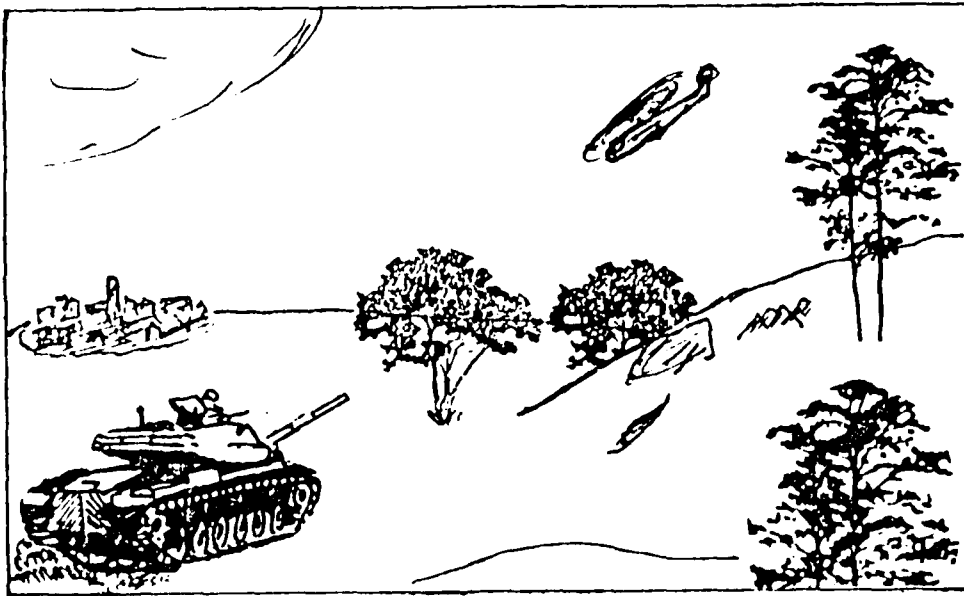   TC COMPLETE

You must engage the BRDM right away because it is a MOST
DANGEROUS THREAT.

The quickest engagement is with the CAL 50.

You could use HEAT BATTLESIGHT gunnery but it would take
longer and the BRDM is BEYOND battlesight range for the HEAT
round that is loaded.

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SCENARIO 11

THE SITUATION

- You are in a traveling overwatch.
- M60A3 is fully operational.
- Round loaded is SABOT.
- A HIND-D helicopter mounting SAGGER missiles begins a pass at you, about 100 meters high, at a range of 500 meters.

What is your fire command?
What are the crew responses?

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SCENARIO 11 ANSWER

The best fire command is:

TC:	GUNNER
	SABOT
	CHOPPER
Loader:	UP
Gunner:	IDENTIFIED
	LASING
TC:	FIRE
	FIRE HEAT
Gunner:	ON THE WAY
	TARGET
TC:	TARGET, CEASE FIRE

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The chopper is a MOST DANGEROUS THREAT, so you want to fire immediately.

The primary round against choppers is HEAT, so your command tells the loader to load a HEAT round for the second shot.

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The M60A3 Fire Command Booklets are
prototype training documents. For
comments or questions contact:

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